REMARKS

In the Office Action of September 20, 2002 in the above-identified application, Claims 1, 6, 7, 10 and 12 - 16 were rejected and Claims 9 and 11 were allowed.

In response, rejected Claims 1 and 10 are canceled. Rejected Claims 6, 7, 12 and 13 are amended to be dependent from independent allowed Claim 11.

It is therefore respectfully submitted that Claims 6 – 7, 9 and 11 -16 are all now allowable. Favorable action is respectfully requested.

Should the Examiner believe that anything further is necessary to place this application in condition for allowance, the Examiner is requested to contact applicants' undersigned attorney at the telephone number listed below.

Kindly charge any additional fees due, or credit overpayment of fees, to Deposit Account No. 01-2135 (Case No. 612.37981CX1).

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP

By_____
Ralph T. Webb
Reg. No. 33,047

Attachment: Marked-up copy to show changes made:

RTW/dlt
Tel.: (703) 312-6600
Fax: (703) 312-6666

ATTACHMENT

MARKED-UP COPY TO SHOW CHANGES MADE:

IN THE CLAIMS

6. (Three times amended) ~~A pipe as claimed in Claim 1, further comprising~~ The system of Claim 11, wherein at least one of said one or more risers further comprises heat insulation means placed on at least the rigid riser part and/or the flexible riser part.

7. (Three times amended) ~~A pipe as claimed in Claim 1,~~ The system of Claim 11 wherein at least one of said one or more risers is characterized in that said rigid riser part is held up to the floating support by holding means (9) allowing said pipe to be tensioned under the effect of its own weight.

12. (Twice amended) ~~A production system as claimed in Claim 10~~ The system of Claim 11, further comprising additional means for tensioning the riser(s).

13. (Twice amended) A method of designing a pipe ~~as claimed in claim 1 for use in conveying a particular fluid~~ in a system as claimed in Claim 11, and for use in a body of water that exerts stresses on the pipe and the floating support due to wave motion, current and wind, the stresses thereby causing motions in the pipe and/or the floating support, and wherein the flexible riser part will have a definable internal pressure resulting from the conveying of the particular fluid, a definable external pressure resulting from the water depth, a definable maximum traction resulting from stresses from the body of water, and a definable maximum allowable curvature, resulting from the composition of the flexible riser part, and wherein the rigid riser part has a defined

holding means wherein it can be connected inside or on an edge of the floating member without coming into contact with the floating member, and wherein the rigid riser part has a defined diameter, and wherein the rigid riser part is subject to stresses generated by the weight of the pipe, the suspended weight of the flexible part, hydrodynamic strains, strains induced by displacements of the floating support, inside pressures and outside pressures,

the method comprising the steps of

A) defining the flexible riser part by the steps of

a) determining extreme motions that the floating support would be subjected to in the body of water and assuming that extreme motions at an end of the flexible riser part where it is connected to the rigid riser part are substantially identical to the extreme motions of the floating support, and

b) selecting a point (Ph) along a vertical axis that coaxial to the axis that the rigid riser part will have when the rigid riser part is connected to the floating support, wherein the first point (Ph) is closer to the bottom of the body of water than to the top of the body of water and determining whether the point (Ph) can serve as the location where the flexible riser part is connected to the rigid riser part, the determining taking into account the extreme motions that the end of the flexible riser part where it is connected to the rigid riser part would be subjected to, as determined by step (a), and further taking into account the inside pressure, the exterior pressure, the nature of the fluid, the maximum traction of the flexible riser part and the maximum allowable curvature, wherein, if point (Ph) cannot serve as the location where the flexible riser part is connected to the rigid riser part, the step (b) is repeated with one or more additional points, until a point is

found that can serve as the location where the flexible riser part is connected to the rigid riser part,

B) defining the rigid riser part by the steps of

a) selecting the length of the rigid riser part so that the length is substantially equal to the value of a distance, under equilibrium conditions, between the upper end of the flexible riser and the holding means, so that length of the rigid riser part is at least equal to half the depth of the water depth,

b) selecting the thickness of the rigid riser part by taking into account stresses generated by the weight of the pipe, the suspended weight of the flexible riser part, hydrodynamic strains, strains induced by displacements of the floating support, inside pressures and outside pressures, and

c) checking that the rigid riser part when the rigid riser part is connected by the holding means inside or on an edge of the floating support, the rigid riser part does not come into contact with the floating support, and wherein if the rigid riser part does contact the floating support, steps A) and B) are repeated with different values for the point (Ph).